



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office

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SERIAL NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.
06/889,746	07/28/86	NILSSEN	

OLE K. NILSSEN
CAESAR DRIVE, ROUTE 5
BARRINGTON, IL 60010

EXAMINER	
CHATHON DRY	
ART UNIT	PAPER NUMBER
200	4

DATE MAILED: 12/03/87

This is a communication from the examiner in charge of your application.

COMMISSIONER OF PATENTS AND TRADEMARKS

- ☒ This application has been examined ☒ Responsive to communication filed on 10/16/87 ☒ This action is made final.

A shortened statutory period for response to this action is set to expire 3 month(s), 0 days from the date of this letter.
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- | | |
|---|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited by Examiner, PTO-892. | 2. <input type="checkbox"/> Notice re Patent Drawing, PTO-948. |
| 3. <input type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449 | 4. <input type="checkbox"/> Notice of informal Patent Application, Form PTO-152 |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474 | 6. <input type="checkbox"/> _____ |

Part II SUMMARY OF ACTION

1. ☒ Claims 1-19 are pending in the application.
Of the above, claims _____ are withdrawn from consideration.
2. ☐ Claims _____ have been cancelled.
3. ☐ Claims _____ are allowed.
4. ☒ Claims 1-19 are rejected.
5. ☐ Claims _____ are objected to.
6. ☐ Claims _____ are subject to restriction or election requirement.
7. ☐ This application has been filed with informal drawings which are acceptable for examination purposes until such time as allowable subject matter is indicated.
8. ☐ Allowable subject matter having been indicated, formal drawings are required in response to this Office action.
9. ☐ The corrected or substitute drawings have been received on _____. These drawings are ☐ acceptable;
☐ not acceptable (see explanation).
10. ☐ The ☐ proposed drawing correction and/or the ☐ proposed additional or substitute sheet(s) of drawings, filed on _____, has (have) been ☐ approved by the examiner. ☐ disapproved by the examiner (see explanation).
11. ☐ The proposed drawing correction, filed _____, has been ☐ approved. ☐ disapproved (see explanation). However, the Patent and Trademark Office no longer makes drawing changes. It is now applicant's responsibility to ensure that the drawings are corrected. Corrections MUST be effected in accordance with the instructions set forth on the attached letter "INFORMATION ON HOW TO EFFECT DRAWING CHANGES", PTO-1474.
12. ☐ Acknowledgment is made of the claim for priority under 35 U.S.C. 119. The certified copy has ☐ been received ☐ not been received
☐ been filed in parent application, serial no. _____; filed on _____.
13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
14. ☐ Other

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1. The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) and (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

2. Claims 1, 4-9, 12, 14-16 and 17-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, for example, the recitation of "voltage conditioning means connected with the power line terminal" is vague and indefinite. Note that the output voltage is exactly the same as the input voltage, 120, volts, in the absence of the full wave bridge rectifier providing an absolute voltage of one half the input voltage and means including resistor AR₁ diac D₁₁ capacitor CT, ... for adjusting the time constant with a corresponding inverter output voltage adjustment. In claims 17 and 18, the recitation of a tack light system ... being operative to provide a high

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frequency voltage ..." is vague and indefinite. How can a track lighting system provide a frequency voltage in the absence of an inverter? How can a voltage conditioning means provide a RMS voltage of 120 volts in the absence of a full wave bridge rectifier? In fact, with the bridge and inverter, the voltage across output terminals is 138.5 volts in the absence of RC time constant circuit FR, AR and CT since transistors Q₁, Q₂ will switch only at an instantaneous near zero. Note that the absolute value of the output voltage is equal to 1/2 the absolute value of the AC input after full wave rectifier and, therefore, the instantaneous magnitude of the voltage at terminals JC and x is 1/2 even without FR, AR and CT. Claims 17 and 18 recite a power track having conductors operative to provide a high frequency voltage. Where is there any structure corresponding to an inverter recited in claims 17 and 18?

3. Claims 1-5, 6-10, 11-16 and 17-19 are rejected under 35 U.S.C. 103 as being unpatentable over Spira et al in view of Kivari and Neumann.

The Spira et al reference discloses a high frequency inverter 22, illustrated in Figure 3, rectifier 21, illustrate in Figure 5, transmission line 36, illustrated in Figure 2, and lamp fixtures 40, 41. Further, in column 9, lines 25-34, the Spira et al reference teaches "Although the arrangement of Figure 4 shows the invention in connection with fluorescent lamps, it should be understood that the invention can be applied to the energization and dimming if any gas

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discharge lamp. Indeed, the invention can be used to operate and dim incandescent lamp..." and in column 7, lines 13-25, particularly, "Amplitude variation is obtained by delaying the application of the firing signal to thyristors 52 and 53 and thus varying the duty cycle of the inverter. Thus, the conduction time of the thyristors, during one half cycle, is reduced and less voltage is applied to the primary winding 56. The Neumann et al reference discloses a distribution system including a track which permits selective connection thereto at any point along the length of the track by means of a connector member power by 120 volts or 240 volts, column 1, lines 35-70. See Kivari's column 1, lines 4-10, "A main object of the invention .. incandescent lamp adapted for use with ordinary house lighting circuit ... including means for reducing line voltage to a relatively low voltage ...". Given the Spira et al specific teaching of an incandescent lamp high frequency circuit without the ballast circuit of Figure 4, it would be obvious to use Kivari's incandescent lamp combination in lieu of ballast-lamp fixture 40. It would be equally as obvious to use the Neumann et al track power distribution means in lieu of the Spira et al transmission line distribution means 36. Note that the track means 11 of Neumann et al and track means DT of the instant case provide only mechanical support for the electrical conductors, the lamps, the sockets, ... etc. and that the operation frequency is immaterial to the track support since a track support

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means will support any frequency operating lamp or even a DC operating lamp.

4. Applicant's arguments filed October 16, 1987 have been fully considered but they are not deemed to be persuasive. It is pointed out that Spira et al specifically teaches at column 9, lines 25-35

"Although the arrangement of Figure 4 shows the invention in connection with fluorescent lamp, ... incandescent lamps if desired to given the user of the circuit flexibility of application"

and Kivari is an incandescent lamp with step-down transformer. Further, the rejection is not based on a substitution of the Neumann et al track lighting support for the Spira et al transmission lines but, rather, the support thereof in a track support.

5. Claims 1-5, 6-10, 11-16 and 17-19 rejected under 35 U.S.C. 103 as being unpatentable over Nilssen, cited, in view of Kivari and Neumann et al. Nilssen's high frequency converter of Figure 1 corresponds exactly to the instant converter of Figure 1 with incandescent lamp THL and step-down transformer HFFT. Obviously, resistance R_3 varies the RC time constant of circuit R_2 , R_3 and C_3 with correspondly variable RMS voltage at terminals CJ and x. It would be obvious to connect across Nilssen's terminals CJ and x either a step-down transformer lamp combination, such as Kivari's step-down transformer lamp combination, or 120 volts incandescent lamp without a step-down transformer. Further, it would be equally as obvious to support Nilssen's incandescent

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lamp system in a track support, such as the Neumann et al rack support.

6. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). The practice of automatically extending the shortened statutory period an additional month upon the filing of a timely first response to a final rejection has been discontinued by the Office. See 1021 TMOG 35.

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 CFR 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

C. Chatmon, Jr:vlw

12-1-87

703-557-6870

Barfield Chatmon Jr.
JAMES D. CHATMON
PRIMARY EXAMINER
GROUP 103